
SUPERFUND FACT SHEET

Landia Chemical Site Lakeland, Polk County, Florida



EPA-Region 4

September 1999

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OPEN HOUSE SET FOR SEPTEMBER 16

The U.S. Environmental Protection Agency (EPA) and the Florida Department of Health will host an open house for the Lakeland community to kick off the upcoming investigation at the Landia Chemical Site. All interested parties are invited to attend.

*** OPEN HOUSE ***

Date: September 16, 1999
Time: 3:00p.m. to 8:00p.m.
Place: Lakeland Center, Hollingsworth Room

The following agencies will have representatives and technical experts on hand to answer questions and provide information to the community. Topics of concern may include: current and upcoming EPA activities at the Site, the schedule for future activities in the area, past investigations, potential health impacts from the Site and the Florida Department of Health's draft Public Health Assessment.

● **U.S. EPA Region 4 South Superfund Management Branch and Emergency Response and Removal Branch** ● **Florida Department of Environmental Protection** ● **Florida Department of Health** ● **Polk County Health Department** ● **City of Lakeland** ● **Representatives from the Potentially Responsible Parties**

EPA Kicks Off Site Investigation

The first major investigation phase in the federal EPA Superfund process is the Remedial Investigation/ Feasibility Study, commonly referred to as the RI/FS. A remedial investigation is conducted at a hazardous waste site to determine the nature and extent of contamination related to the site; the feasibility study identifies and screens cleanup alternatives and analyzes the technology and costs of alternatives. See **Figure 1** on the insert for a breakdown of the entire Superfund Process.

EPA serves as lead agency at the Landia Chemical Site. EPA, Florida Favorite Fertilizer (FFF), and Agrico Chemical (Agrico) are negotiating an Administrative Order on Consent where FFF and Agrico will perform the investigations with EPA oversight. Bill Denman is EPA's Remedial Project Manager for the Site.

By the end of the year, contractors for FFF and Agrico will gather samples in the area to completely determine the nature and extent of site-related contamination, the pathways (soil, water, air) for contaminant movement and potential receptors. This new information will be analyzed along with the results of previous investigations to develop a better understanding of the Site in terms of a long-term cleanup.

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EPA Site Investigation – continued

As previous investigations concentrated primarily on the Landia and FFF properties, this investigation will expand beyond those property boundaries to fully determine the nature and extent of contamination.

EPA has established the following requirements for data to be gathered in the upcoming Landia Chemical Site RI.

Soil: **Collect surface and subsurface soil samples** from the off-site adjacent properties to better define the extent of soil contamination.

Suspected Waste Disposal Area: **Take samples from test pits in areas of potential waste disposal** to determine the presence, extent, and nature of buried material south of Olive Street.

Groundwater: **Collect and analyze groundwater samples** from the surficial aquifer to define the horizontal extent of contamination on adjacent properties.

- **Collect groundwater samples** from the Floridan Aquifer System to determine the vertical extent of groundwater contamination.

- **Collect water level measurements** to determine horizontal and vertical flow direction and gradients of the groundwater.

Surface Water/Sediment: **Collect surface water and sediment samples** to determine the current extent of contamination in the Wayman Street ditch and Itchepackesassa Creek.

Air: **Collect air samples downwind from identified source areas** to define the potential for off-site migration of contaminants via windblown particles.

1999 Schedule of Site Activities -- July 1999 to December 1999.

July EPA Emergency Response and Removal personnel conduct sampling at the Site to determine if a removal action is necessary.

**July/
August** EPA and Potentially Responsible Parties (PRPs), FFF and Agrico, negotiate the terms of a comprehensive site-specific RI/FS workplan.

September EPA and PRPs sign the Administrative Order on Consent, a legal agreement between EPA and the PRPs to conduct the RI/F.

EPA and Florida Department of Health (FDOH) hold an open house to enable the community to ask questions and meet key personnel.

EPA establishes an Information Repository; Site documents, such as general EPA information, the Public Health Assessment, and the RI/FS workplan, are available to the public.

FDOH receives comments on the Draft Public Health Assessment.

October EPA conducts community interviews in preparation for the Community Involvement Plan.

Contractors for FFF and Agrico obtain property access and begin preparations for sampling.

FDOH releases the Final Public Health Assessment with recommendations.

November EPA approves Sampling and Analysis Plan, Health and Safety Plan, and Investigation Derived Waste Plan submitted by FFF and Agrico.

December EPA completes the Community Involvement Plan and places a copy in the Information Repository.

EPA begins oversight of RI/FS field work performed by the Respondents, FFF and Agrico.

A History of the Landia Chemical Site

The Landia Chemical Site, located in Lakeland, Polk County, Florida, is in an industrial pocket surrounded by commercial and residential activity. The Site is bordered by W. Olive Street on the south and a CSX railroad corridor on the north. Landia Chemical and others operated a pesticide facility on about 5 acres on the east side until 1987. Currently, the Florida Favorite Fertilizer Company (FFF) operates a fertilizer storage, mixing, and distribution business on 7 acres to the west.

Site Discovery

In May 1983, the Lakeland Fire Department received about 200 telephone calls from nearby residents. They complained that smoke from a fire at Landia caused chest pains and difficulty breathing.

In September 1983, residents along Wayman Street, south of the Site, complained about pesticide odors from the ditch behind their houses. They reported milky, yellow-colored water in the ditch, which receives runoff from the Landia property. They also said the pesticide odors were causing nausea, headaches, dizziness, and eye and respiratory irritation.

As a result, Florida Department of Environmental Protection (FDEP) investigated the Site and found high concentrations of pesticides in the water and sediments in the unlined, north-south ditch west of Beech Avenue draining the Site. Residents who had contact with the water or sediments were advised to seek medical assistance. Temporary warning signs were posted along the banks of the drainage ditch.

Prior Cleanup Activities

Since Site discovery, several actions have been taken at the Site to address the release of hazardous substances, including pesticides, gasoline, and diesel and jet fuel.

- **1983** - Landia Chemical Company removed 136 tons of pesticide-contaminated sediments from a 1,061-foot section of the ditch south of Olive Street; constructed a containment dike along the south and southwest property boundaries; and constructed a 1-foot deep runoff basin.
- **1989** - FFF removed one 2,000-gallon gasoline underground storage tank and two 3,000-gallon diesel underground storage tanks.

- **1991** - FFF removed two 10,000-gallon aboveground fuel tanks.
- **1992** - Central Florida Pipeline recovered 4,500 gallons of a 6,200-gallon jet fuel spill, following the rupture of an underground pipeline along the railroad tracks on the Site's north side. Also removed 10 cubic yards of contaminated soil.

Previous Investigations

Numerous investigations have been conducted at the Landia Chemical facility, the FFF facility, and surrounding areas. In 1984, EPA completed a preliminary assessment and site inspection, the first phases of the federal Superfund process. (See **Figure 1**) After the site inspection was completed, FDEP took the lead on the Site. In March 1986, Landia Chemical entered into a Consent Order with FDEP to conduct a Contamination Assessment, which was completed in 1988. At the direction of FDEP, several facility owners/operators began another study in 1991 to determine the extent of contamination. The assessment activities were completed in 1997; the findings were published in the Contamination Assessment Report, which concluded:

- Primary contaminants of concern at the Site are organochlorine compounds in groundwater and soils (including sediments), metals in soils, and sulfate and nitrate in groundwater.
- Chlordane was the most wide-spread pesticide in soils, and toxaphene was detected in a localized area. Other pesticides identified included DDT and related compounds, lead, and arsenic.
- Florida drinking water standards were exceeded for lindane, nitrate, sulfate, chloride, and total dissolved solids in the Site groundwater.
- Sulfate was determined to have migrated farther in the intermediate water-bearing zone than in the shallow water-bearing zone.
- Sediment contamination was limited to the northern part of the Wayman Street ditch.

In 1997, FDEP conducted a site-wide study of the Landia Chemical and FFF properties, including adjacent properties. This study was far more extensive than any previous study, both in the volume of data collected and in the geographic area investigated. The results were used to

further delineate the extent of contamination in soil/sediments and groundwater. However, the full extent of contamination still was not known.

After reviewing the Site in 1998, EPA worked with FDEP to assume the lead for future assessment of the Site. EPA then initiated preparation of a Hazard Ranking System (HRS) package that will be used to place the Site on the National Priorities List (NPL). EPA also initiated the Remedial Investigation (RI) process that will expand on the assessments already conducted. In addition, EPA will conduct community interviews and develop a Community Involvement Plan. (See **Figure 1**- The Superfund Process)

Need Technical Assistance?

EPA values your input and wants to help you understand the technical information related to the Site cleanup so that you can make informed decisions. The Technical Assistance Grant Program (TAG) was designed to accomplish this goal.

Under Superfund law, EPA can award a TAG of up to \$50,000 per site to a qualified community group. Using these funds, the group can hire an independent technical advisor to help them better understand technical data, site hazards, and the different technologies available for their site cleanup.

More information about TAGs is available by contacting Regional EPA Community Involvement Coordinator, Rhonda Newberry Foucher at (404) 562-8867. The Information Repository also contains information on how to apply for a grant.

Community Health Information

Some residents are concerned about their health as a result of living near the Landia Chemical Site. The Florida Department of Health (FDOH) is responsible for assessing the past, current, and future public health threat from exposure to chemicals in the environment at and around hazardous waste sites. Conclusions and recommendations are published in a public health assessment report.

On July 30, 1999, FDOH, under cooperative agreement with the Agency for Toxic Substances and Disease Registry, completed a Draft Public Health Assessment for the Landia Chemical Site. FDOH concluded that chemicals found on the Site are a public health hazard. So far, the data does not indicate that the Site poses an imminent or immediate health threat. **Recommendations** made in the draft report are as follows.

- **Residents should not go on the Site to avoid contact with on-site surface soil.** Accidental ingestion of small amounts of arsenic-contaminated soil can cause serious illness, particularly for children.
- **Residents should not use contaminated groundwater as a drinking water supply** Newborns are at greatest risk.
- **Prevent exposure to DDT/DDE/DDD- contaminated off-site surface soil.**

FDOH is soliciting public comments on the draft report through September 30, 1999, and will address remaining health concerns in the final Public Health Assessment.

The Role of Community Involvement

Objectives of Superfund community involvement are to:

- Provide the public the opportunity to express comments on and provide input to technical decisions
- Inform the public of planned or ongoing actions
- Identify and resolve conflict.

EPA plans to conduct the following community involvement activities to support these objectives.

Community Interviews - EPA will invite local residents, government and health officials, and other interested parties to participate in community interviews in the Lakeland area. The purpose of these interviews is to determine the community's level of interest in the Site, their major concerns and issues, and their information needs.

Community Involvement Plan - Based on the interviews, EPA will prepare a Community Involvement Plan, which is a formal plan for EPA community involvement program. The Plan is designed to ensure opportunities for public involvement, determine specific activities to encourage this participation, and educate citizens about the Site.

Information Repository and Administrative Record - EPA will establish an Information Repository at a public building that is convenient for local residents. The repository will contain site-related information, technical reports, reference documents, and TAG information that the public may review and copy. EPA will update the Information Repository regularly.

EPA also will establish an Administrative Record near the Site. This file will include all documents that EPA relies on to select a long-term cleanup action.